

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

1. (Currently amended) A molecular detection method comprising visualizing and identifying a chain molecule immobilized on a plastic substrate by probing with a scanning probe microscope in solution.

2. (Currently amended) The molecular detection method according to Claim 1, wherein the chain molecule immobilized on the plastic substrate is an uprightly disposed single strand molecule.

3. (Original) The molecular detection method according to Claim 2, wherein the uprightly disposed single strand molecule is a nucleic acid, a peptide nucleic acid, a peptide, a glycopeptide, a protein, a glycoprotein, a polysaccharide, a synthetic polymer, or an analog thereof.

4. (Currently amended) The molecular detection method according to Claim 1, wherein the chain molecule immobilized on the plastic substrate is a multiple strand molecule comprising an uprightly disposed single strand molecule and at least one chain molecule that can bind to the single strand molecule.

5. (Original) The molecular detection method according to Claim 4, wherein the multiple strand molecule is a complex of one or more types of molecules selected from a nucleic acid, a peptide nucleic acid, a peptide, a glycopeptide, a protein, a glycoprotein, a polysaccharide, a synthetic polymer, or an analog thereof.

6. (Previously presented) A molecular counting method comprising detecting a molecule by the method according to Claim 1, and counting the number of detected chain molecules per unit area.

7. (Previously presented) A molecular localization detection method comprising detecting a molecule by the method according to Claim 1, and counting the number of detected chain molecules per unit area, thus giving molecular localization information.

8. (Withdrawn) A molecular detection system for detecting a chain molecule immobilized on a substrate, the system comprising a jig for holding the substrate, a container housing the substrate and a solution, a probe, a probe detector, a drive mechanism for scanning the substrate or the probe in three dimensions, and a drive control circuit for controlling the drive mechanism.

9. (Withdrawn) The molecular detection system according to Claim 8, wherein it further comprises a device which visualizes the chain molecule.

10. (Withdrawn) The molecular detection system according to Claim 8, wherein it further comprises a device which counts the chain molecules.
11. (Withdrawn) The molecular detection system according to Claim 8, wherein it further comprises a device which provides information about localization of the chain molecules.
12. (Withdrawn) The molecular detection system according to Claim 11, wherein it further comprises a device which discriminates between substrates with chain molecules immobilized thereon.
13. (Withdrawn) The molecular detection system according to Claim 8, wherein the chain molecule immobilized on the substrate is a single strand molecule uprightly disposed on the substrate.
14. (Withdrawn) The molecular detection system according to Claim 13, wherein the uprightly disposed single strand molecule is a nucleic acid, a peptide nucleic acid, a peptide, a glycopeptide, a protein, a glycoprotein, a polysaccharide, a synthetic polymer, or an analog thereof.
15. (Withdrawn) The molecular detection system according to Claim 8, wherein the chain molecule immobilized on the substrate is a multiple strand molecule comprising the uprightly disposed single strand molecule and at least one chain molecule that can bind to the single strand molecule.

16. (Withdrawn) The molecular detection system according to Claim 15, wherein the multiple strand molecule is a complex of one or more types of molecules selected from a nucleic acid, a peptide nucleic acid, a peptide, a glycopeptide, a protein, a glycoprotein, a polysaccharide, a synthetic polymer, or an analog thereof.

17. (Currently amended) A production process for a substrate with a chain molecule immobilized thereon, the production process including the method according to Claim 1-~~to~~.

18. (Withdrawn) A production process for a substrate with a chain molecule immobilized thereon, the production process employing the system according to Claim 8.

19. (New) A molecular detection method comprising visualizing and identifying a chain molecule immobilized on a substrate by probing with a scanning probe microscope in solution, wherein the chain molecule immobilized on the substrate is a nucleic acid.

20. (New) The molecular detection method according to Claim 19, wherein the nucleic acid is uprightly disposed on the substrate.

21. (New) The molecular detection method according to Claim 19, wherein the chain molecule immobilized on the substrate is a multiple strand molecule comprising the nucleic acid and at least one chain molecule that can bind to the nucleic acid.

22. (New) The molecular detection method according to Claim 21, wherein the multiple strand molecule is a complex of the nucleic acid and one or more types of molecules selected from a nucleic acid, a peptide nucleic acid, a peptide, a glycopeptide, a protein, a glycoprotein, a polysaccharide, a synthetic polymer, or an analog thereof.

23. (New) A molecular counting method comprising detecting a molecule by the method according to Claim 19, and counting the number of detected chain molecules per unit area.

24. (New) A molecular localization detection method comprising detecting a molecule by the method according to Claim 19, and counting the number of detected chain molecules per unit area, thus giving molecular localization information.

25. (New) A production process for a substrate with a chain molecule immobilized thereon, the production process including the method according to Claim 19.

26. (New) The molecular detection method according to Claim 19, wherein said substrate is a plastic substrate.